



## PTILONORHYNCHUS HOLOSERICEUS, Kuhl.

## Satin Bower-bird.

Ptilonorhynchus holosericeus, Kuhl, Beytr. zur Zool. S. 150.—Wagl. Syst. Av. sp. 1.—G. R. Gray, Gen. of Birds, p. 40.—Swains. Class. of Birds, vol. ii. p. 271.

Pyrrhocorax violaceus, Vieill. Nouv. Dict. d'Hist. Nat., tom. vi. p. 569.—Ib. Ency. Méth. 1823, p. 896.

Kitta holosericea, Temm. Pl. Col. 395 and 422.—Less. Traité d'Orn., p. 350, pl. 46. fig. 1.

Satin Grakle, Lath. Gen. Hist., vol. iii. p. 171.

Ptilonorhynchus MacLeayii, Lath. MSS., Vig. and Horsf. in Linn. Trans., vol. xv. p. 263.

Corvus squamulosus, Ill., female or young?

Ptilonorhynchus squamulosus, Wagl. Syst. Av. sp. 2, female or young?

Satin Bird, of the Colonists of New South Wales.

Cowry, of the Aborigines of the coast of New South Wales.

Although this species has been long known to ornithologists, and is familiar to the colonists of New South Wales, its habits, which in many respects are most extraordinary, have hitherto escaped attention; or if not entirely so, have never been brought before the scientific world. It is, therefore, a source of high gratification to myself to be the first to place them on record.

One point to which I more particularly allude,—a point of no ordinary interest, both to the naturalist and the general admirer of nature,—is the formation of a bower-like structure by this bird for the purpose of a playing-ground or hall of assembly, a circumstance in its economy which adds another to the many anomalies connected with the Fauna of Australia.

The localities favourable to the habits of the Satin Bower-bird are the luxuriant and thickly-foliaged brushes stretching along the coast from Port Philip to Moreton Bay, the cedar-brushes of the Liverpool range, and most of the gullies of the great mountain-chain separating the colony from the interior. So far as is at present known, it is restricted to New South Wales; certainly it is not found so far to the westward as South Australia, and I am not aware of its having been seen on the north coast; but its range in that direction can only be determined by future research.

It is a stationary species, but appears to range from one part of a district to another, either for the purpose of varying the nature, or of obtaining a more abundant supply of food. Judging from the contents of the stomachs of the many specimens I dissected, it would seem that it is altogether granivorous and frugivorous, or if not exclusively so, that insects form but a small portion of its diet. Independently of numerous berry-bearing plants and shrubs, the brushes it inhabits are studded with enormous fig-trees, some of them towering to the height of two hundred feet; among the lofty branches of these giants of the forest, the Satin Bower-bird and several species of Pigeons find in the small wild fig, with which the branches are loaded, an abundant supply of a favourite food: this species also commits considerable depredation on any ripening corn near the localities it frequents. It appears to have particular times in the day for feeding, and when thus engaged among the low shrub-like trees, I have approached within a few feet without creating alarm; but at other times I have found this bird extremely shy and watchful, especially the old males, which not unfrequently perch on the topmost branch or dead limb of the loftiest tree in the forest, whence they can survey all round, and watch the movements of the females and young in the brush below.

In the autumn they associate in small flocks, and may often be seen on the ground near the sides of rivers, particularly where the brush descends in a steep bank to the water's edge.

Besides the loud liquid call peculiar to the male, both sexes frequently utter a harsh, unpleasant, guttural note indicative of surprise or displeasure. The old black males are exceedingly few in number, as compared with the females and young male birds in the green dress, from which and other circumstances I am led to believe that at least two, if not three years, elapse before they attain the rich satin-like plumage, which, when once perfectly assumed, is, I believe, never again thrown off.

I regret to state, that although I used my utmost endeavours, I could never discover the nest and eggs of this species, neither could I obtain any authentic information respecting them, either from the natives or the colonists, of whom I made frequent inquiries.

The extraordinary bower-like structure, alluded to above, first came under my notice at Sydney, to the Museum of which place an example had been presented by Mr. Charles Coxen, as the work of the Satin Bower-bird. I at once determined to leave no means untried for ascertaining every particular relating to this peculiar feature in the bird's economy, and on visiting the cedar-brushes of the Liverpool range I discovered several of these bowers or playing-places; and a glance at the accompanying illustration will, I presume, give a more correct idea of the nature of these erections than the most minute description. They are usually placed under the shelter of the branches of some overhanging tree in the most retired part of the forest: they differ considerably in size, some being a third larger than the one here represented, while others are much smaller. The base consists of an extensive and rather convex platform of sticks firmly interwoven, on the centre of which the bower itself is built: this, like the platform on which it is placed and with which it is interwoven, is formed of sticks and twigs, but of a more slender and flexible descrip-

tion, the tips of the twigs being so arranged as to curve inwards and nearly meet at the top: in the interior of the bower the materials are so placed that the forks of the twigs are always presented outwards, by which arrangement not the slightest obstruction is offered to the passage of the birds. The interest of this curious bower is much enhanced by the manner in which it is decorated at and near the entrance with the most gaily-coloured articles that can be collected, such as the blue tail-feathers of the Rose-hill and Pennantian Parrots, bleached bones, the shells of snails, &c.; some of the feathers are stuck in among the twigs, while others with the bones and shells are strewed about near the entrances. The propensity of these birds to pick up and fly off with any attractive object, is so well known to the natives, that they always search the runs for any small missing article, as the bowl of a pipe, &c., that may have been accidentally dropped in the brush. I myself found at the entrance of one of them a small neatly-worked stone tomahawk, of an inch and a half in length, together with some slips of blue cotton rags, which the birds had doubtless picked up at a deserted encampment of the natives.

For what purpose these curious bowers are made, is not yet, perhaps, fully understood; they are certainly not used as a nest, but as a place of resort for many individuals of both sexes, which, when there assembled, run through and around the bower in a sportive and playful manner, and that so frequently that it is seldom entirely deserted.

The proceedings of these birds have not been sufficiently watched, to render it certain whether the runs are frequented throughout the whole year or not; but it is highly probable that they are merely resorted to as a rendezvous, or playing-ground, at the pairing time and during the period of incubation. It was at this season, as I judged from the state of the plumage and from the internal indications of those I dissected, that I visited these localities; the bowers I found had been recently renewed; it was however evident, from the appearance of a portion of the accumulated mass of sticks, &c., that the same spot had been used as a place of resort for many years. Mr. Charles Coxen informed me, that, after having destroyed one of these bowers and secreted himself, he had the satisfaction of seeing it partially reconstructed; the birds engaged in this task, he added, were females. With much care and trouble I succeeded in bringing to England two fine specimens of these bowers, one of which I presented to the British Museum, and the other to the collection at Leyden, where they may be seen by all those who take an interest in the subject.

It will be observed, that the two following nearly allied species, *Chlamydera maculata* and *Chlam. nuchalis*, also build similar erections, and that in them the decorative propensity is carried to a much greater extent than in the Satin Bower-bird.

The adult male has the whole of the plumage of a deep shining blue-black, closely resembling satin, with the exception of the primary wing-feathers, which are of a deep velvety black, and the wing-coverts, secondaries and tail-feathers, which are also of a velvety black, tipped with the shining blue-black lustre; irides beautiful light blue with a circle of red round the pupil; bill bluish horn, passing into yellow at the tip; legs and feet yellowish white.

The female has the head and all the upper surface greyish green; wings and tail dark sulphur-brown, the inner webs of the primaries being the darkest; under surface containing the same tints as the upper, but very much lighter, and with a wash of yellow; each feather of the under surface also has a crescent-shaped mark of dark brown near the extremity, giving the whole a scaly appearance; irides of a deeper blue than in the male, and with only an indication of the red ring; bill dark horn-colour; feet yellowish white tinged with olive.

Young males closely resemble the females, but differ in having the under surface of a more greenish yellow hue, and the crescent-shaped markings more numerous; irides dark blue; feet olive brown; bill blackish olive.

The Plate represents the bower, an old male, female, and two young males; one in the green dress and the other in a state of change, all about a fifth less than the natural size.